## Amendments to the claims

## Listing of claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

## 1. (Currently amended) A compound of formula (I):

$$\begin{array}{c|c}
A - N & B \\
 & H \\
 & W_1 & W_4 \\
 & W_2 & W_3
\end{array}$$

$$\begin{array}{c|c}
R^1 & Z_1 & Z_5 \\
 & Z_2 & N & Z_4
\end{array}$$
(I)

wherein:

one of  $Z_1$ ,  $Z_2$ ,  $Z_3$ ,  $Z_4$  and  $Z_5$  is N, one is  $CR^{1a}$  and the remainder are CH, or one or two of  $Z_1$ ,  $Z_2$ ,  $Z_3$ ,  $Z_4$  and  $Z_5$  are independently  $CR^{1a}$  and the remainder are CH;

R¹ and R¹a are independently hydrogen; hydroxy;  $(C_{1-6})$ alkoxy unsubstituted or substituted by  $(C_{1-6})$ alkoxy, amino, piperidyl, guanidino or amidino any of which is optionally N-substituted by one or two  $(C_{1-6})$ alkyl, acyl or  $(C_{1-6})$ alkylsulphonyl groups, CONH2, hydroxy,  $(C_{1-6})$ alkylthio, heterocyclylthio, heterocyclyloxy, arylthio, aryloxy, acylthio, acyloxy or  $(C_{1-6})$ alkylsulphonyloxy;  $(C_{1-6})$ alkoxy-substituted $(C_{1-6})$ alkyl; halogen;  $(C_{1-6})$ alkyl;  $(C_{1-6})$ alkylthio; trifluoromethyl; trifluoromethoxy; nitro; cyano; azido; acyl; acyloxy; acylthio;  $(C_{1-6})$ alkylsulphonyl;  $(C_{1-6})$ alkylsulphonyl; arylsulphoxide or an amino, piperidyl, guanidino or amidino group optionally N-substituted by one or two  $(C_{1-6})$ alkyl, acyl or  $(C_{1-6})$ alkylsulphonyl groups;

provided that when  $Z_1$ ,  $Z_2$ ,  $Z_3$ ,  $Z_4$  and  $Z_5$  are  $CR^{1a}$  or CH, then  $R^1$  is not hydrogen;

 $\mathsf{W}_1,\,\mathsf{W}_2,\,\mathsf{W}_3$  and  $\mathsf{W}_4$  are each independently selected from N or  $\mathsf{CR}^3;$ 

each R<sup>3</sup> is independently selected from:

hydrogen; hydroxy; halogen; trifluoromethyl; trifluoromethoxy; cyano; nitro; azido; acyl; acyloxy; acylthio; amino, mono- and di- $(C_{1-6})$ alkylamino; and substituted and unsubstituted ( $C_{1-6}$ )alkoxy, ( $C_{1-6}$ )alkyl, ( $C_{3-7}$ )cycloalkyl, aminocarbonyl, ( $C_{1-6}$ )alkylsulphonyl, and ( $C_{1-6}$ )alkylsulphoxide;

A is (CRR)n;

B is  $(CRR)_m$ , C=O, or  $SO_2$ :

n is 1 or 2;

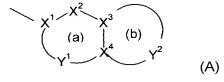
m is 1 or 2;

provided that when n is 1, m is 2; when n is 2, m is 1; and when B is C=O or SO<sub>2</sub> then n is 2;

each R is independently selected from

hydrogen; halogen; trifluoromethyl; trifluoromethoxy; cyano; nitro; azido; acyl; acyloxy; acylthio; amino, mono- and di- $(C_{1-6})$ alkylamino; and substituted and unsubstituted ( $C_{1-6}$ )alkoxy, ( $C_{1-6}$ )alkyl, ( $C_{3-7}$ )cycloalkyl, aminocarbonyl, ( $C_{1-6}$ )alkylthio, ( $C_{1-6}$ )alkylsulphonyl, and ( $C_{1-6}$ )alkylsulphoxide;

 ${\sf R}^2$  is a substituted or unsubstituted bicyclic heterocyclic ring system of formula (A):



containing up to four heteroatoms in each ring in which

ring (a) is substituted or unsubstituted pyridine and ring (b) is substituted or unsubstituted non-aromatic;

 $X^1$  is C;

 $X^2$  is N or  $CR^4$ :

X<sup>3</sup> and X<sup>4</sup> are C;

Y<sup>1</sup> is a 2 atom linker group each atom of which is independently selected from N and CR<sup>4</sup>;

 $Y^2$  is a 4 atom linker group having S bonded to  $X^4$  and NHCO bonded via N to  $X^3$  in which the other atom is  $CR^4R^5$ ; and

each  $R^4$  and  $R^5$  is independently selected from: hydrogen;  $(C_{1-4})$ alkylthio; halo; carboxy( $C_{1-4}$ )alkyl; halo( $C_{1-4}$ )alkoxy; halo( $C_{1-4}$ )alkyl; ( $C_{1-4}$ )alkyl;  $(C_{2-4})$ alkyl; ( $C_{2-4}$ )alkenyl; ( $C_{2-4}$ )alkoxycarbonyl; formyl; ( $C_{1-4}$ )alkylcarbonyl; ( $C_{2-4}$ )alkenyloxycarbonyl; ( $C_{2-4}$ )alkylcarbonyloxy; ( $C_{1-4}$ )alkoxycarbonyl( $C_{1-4}$ )alkyl; hydroxy; hydroxy( $C_{1-4}$ )alkyl; mercapto( $C_{1-4}$ )alkyl; ( $C_{1-4}$ )alkoxy; nitro; cyano; carboxy; amino or aminocarbonyl [[is]] optionally substituted by ( $C_{1-4}$ )alkoxycarbonyl, ( $C_{1-4}$ )alkylcarbonyl, ( $C_{2-4}$ )alkenyloxycarbonyl, ( $C_{2-4}$ )alkenylcarbonyl, ( $C_{1-4}$ )alkyl or ( $C_{2-4}$ )alkenyl and optionally further substituted by ( $C_{1-4}$ )alkyl or ( $C_{2-4}$ )alkenyl; ( $C_{2-6}$ )alkenyl; ( $C_{2-4}$ )alkenylsulphonyl; ( $C_{2-4}$ 

 $(C_{1-4})$ alkylsulphonyl;  $(C_{2-4})$ alkenylsulphonyl; **[[or]]** aminosulphonyl wherein the amino group is optionally mono- or di-substituted by  $(C_{1-4})$ alkyl or  $(C_{2-4})$ alkenyl; aryl; aryl $(C_{1-4})$ alkyl; <u>and aryl $(C_{1-4})$ alkoxy</u>; or  $R^4$  and  $R^5$  may together represent oxo; and

each R<sup>6</sup> is independently hydrogen; trifluoromethyl;  $(C_{1\_4})$ alkyl unsubstituted or substituted by hydroxy,  $(C_{1\_6})$ alkoxy,  $(C_{1\_6})$ alkylthio, halo or trifluoromethyl;  $(C_{2\_4})$ alkenyl; aryl $(C_{1\_4})$ alkyl; arylcarbonyl; heteroarylcarbonyl;  $(C_{1\_4})$ alkoxycarbonyl;  $(C_{1\_4})$ alkylcarbonyl; formyl;  $(C_{1\_6})$ alkylsulphonyl; or aminocarbonyl wherein the amino group is optionally substituted by  $(C_{1\_4})$ alkoxycarbonyl,  $(C_{1\_4})$ alkylcarbonyl,  $(C_{2\_4})$ alkenyloxycarbonyl,  $(C_{1\_4})$ alkyl or  $(C_{2\_4})$ alkenyl and optionally further substituted by  $(C_{1\_4})$ alkyl or  $(C_{2\_4})$ alkenyl;

wherein the term acyl means a formyl or a (C<sub>1-6</sub>)alkylcarbonyl group;

or a pharmaceutically acceptable salt thereof.

- 2. (Currently amended) A compound according to claim 1 wherein  $Z_5$  is CH or N,  $Z_3$  is CH or CF and  $Z_1$ ,  $Z_2$  and  $Z_4$  are each CH, or  $Z_4$  is N,  $Z_3$  is CH or CF and  $Z_2$ ,  $Z_4$  and  $Z_5$  are each CH.
- 3. (Original) A compound according to claim 1 wherein  $R^1$  is methoxy and  $R^{1a}$  is H or when  $Z_3$  is  $CR^{1a}$  it may be C-F.
- 4. (Currently amended) A compound according to claim 1 wherein  $\underline{W_1}$ - $\underline{W_4}$  are independently  $\underline{CR^3}$ -
- a) W<sub>1</sub>-W<sub>4</sub>-are independently CR<sup>3</sup>;
- b) W<sub>1</sub>, W<sub>3</sub> and W<sub>4</sub> are N and W<sub>2</sub> is CR<sup>3</sup>;
- c) W2 is N and W4, W3 and W4 are independently CR3;
- d) W<sub>3</sub> is N and W<sub>1</sub>, W<sub>2</sub> and W<sub>4</sub> are independently CR<sup>3</sup>; or
- e) W<sub>4</sub> is N and W<sub>1</sub>-W<sub>3</sub> are independently CR<sup>3</sup>.
- 5. (Original) A compound according to claim 1 wherein  $R^3$  is independently selected from hydrogen, substituted and unsubstituted ( $C_{1-6}$ )alkoxy, and  $NH_2$ .
- 6. (Original) A compound according to claim 1 wherein R is independently selected from hydrogen, substituted and unsubstituted ( $C_{1-6}$ )alkyl, CONH<sub>2</sub>, COOH, hydroxy, halogen, and substituted and unsubstituted ( $C_{1-6}$ )alkoxy.
- 7. Canceled.
- 8. (Previously presented) A compound according to claim 1 wherein  $R^2$  is selected from 4H-pyrido[3,2-b][1,4]thiazin-3-one-6-yl and 1H-pyrido[3,2-b][1,4]thiazin-2-one-7-yl.
- 9. (Currently amended) A compound according to claim 1 which is:
- 6-({2-[4-(6-Methoxy-[1,5]naphthyridin-4-yl)phenyl]ethylamino}methyl)-4*H*-pyrido[3,2-*b*][1,4]thiazin-3-one;
- 7-({2-[4-(6-Methoxy-[1,5]naphthyridin-4-yl)phenyl]ethylamino}methyl)-1*H*-pyrido[3,2-*b*][1,4]thiazin-2-one;

6-({2-[4-(6,8-difluoroquinolin-4-yl)phenyl]ethylamino}methyl)-4*H*-pyrido[3,2-*b*][1,4]thiazin-3-one;

6-({2-[4-(8-Fluoro-6-methoxyquinolin-4-yl)phenyl]ethylamino}methyl)-4*H*-pyrido[3,2-*b*][1,4]thiazin-3-one;

6-({2-[6-(6-methoxy-[1,5]naphthyridin-4-yl)pyridin-3-yl]ethylamino}methyl)-4*H*-pyrido[3,2-*b*][1,4]thiazin-3-one;

6-({2-[5-(6-methoxy-[1,5]naphthyridin-4-yl)pyridin-2-yl]ethylamino}methyl)-4*H*-pyrido[3,2-*b*][1,4]thiazin-3-one;

N-(2-{6-[6-(methyloxy)-1,5-naphthyridin-4-yl]-3-pyridinyl}ethyl)-3-oxo-3,4-dihydro-2H-pyrido[3,2-b][1,4]thiazine-6-carboxamide; and or

*N*-(2-{5-[6-(methyloxy)-1,5-naphthyridin-4-yl]-2-pyridinyl}ethyl)-3-oxo-3,4-dihydro-2*H*-pyrido[3,2-*b*][1,4]thiazine-6-carboxamide; or a pharmaceutically acceptable salt thereof.

- 10. (Original) A pharmaceutical composition comprising a compound according to claim 1 and a pharmaceutically acceptable carrier.
- 11. (Currently amended) A method of treating bacterial infections <u>due to an organism selected from Staphylococcus aureus, Staphylococcus epidermidis, Streptococcus pneumoniae, Streptococcus pyogenes, Enterococcus faecalis, Enterococcus faecium, Haemophilus influenzae, E. coli, and Moraxella catarrhalis in mammals which comprises the administration to a mammal in need thereof an effective amount of a compound according to claim 1.</u>
- 12. (Previously presented) A compound according to claim 1 wherein  $X^2$  is N and  $Y^1$  is a 2 atom linker group each atom of which is independently  $CR^4$ .
- 13. (New) A method according to claim 11 wherein the mammal is a human.
- 14. (New) A compound according to claim 1 wherein  $Z_1$  is N,  $Z_3$  is CH or CF and  $Z_2$ ,  $Z_4$  and  $Z_5$  are each CH.
- 15. (New) A compound according to claim 1 wherein  $W_1$ ,  $W_3$  and  $W_4$  are N and  $W_2$  is  $CR^3$ .

- 16. (New) A compound according to claim 1 wherein  $W_2$  is N and  $W_1$ ,  $W_3$  and  $W_4$  are independently  $CR^3$ .
- 17. (New) A compound according to claim 1 wherein  $W_3$  is N and  $W_1$ ,  $W_2$  and  $W_4$  are independently  $CR^3$ .
- 18. (New) A compound according to claim 1 wherein  $W_4$  is N and  $W_1$ - $W_3$  are independently  $CR^3$ .
- 19. (New) A compound according to claim 1 wherein R<sup>4</sup> is hydrogen, fluorine or nitro and R<sup>5</sup> is hydrogen.
- 20. (New) A compound according to claim 1 wherein R is hydrogen.
- 21. (New) A compound according to claim 1 wherein R<sup>3</sup> is hydrogen.